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ABSTRACT

A task group was charged with remodeling an existing connected old building-new building complex to make it feasible for a house-oriented senior high school educational program. Constraints to be resolved were keeping costs low, maintaining departmental proximity while encouraging interdisciplinary activities, providing for small groups, and arranging for even utilization of facilities. The group decided on an interactional houseplan that organized academic disciplines by department and the students into heterogeneous groups each with 25 students and one faculty member. Physical modifications to meet the needs of this reorganization are itemized. Background information contained in the report includes school floor plans, community demographic characteristics, educational philosophy and objectives, curriculum program, extracurricular activities, enrollment projections, specifications for teaching and learning areas, and comparisons between the new middle school and the present high school. (Author/MLF)

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ECONOMICALLY FUNCTIONAL CONSIDERATIONS FOR AN INTERACTIONAL HOUSE PLAN, SENIOR HIGH SCHOOL (TASK GROUP REPORT)

BY
WARREN I. PAUL, PH.D.

"THE FEASIBILITY OF RECYCLED SPACE"
REGIONAL CONFERENCE, JUNE 4-6, 1975

SHERATON HEIGHTS HOTEL
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NORTHEAST REGION
COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL

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I. GENERAL INFORMATION

PREFACE

Task: Recommend or suggest ways of modifying, remodeling, or otherwise changing an existing connected old building-new building complex to make it feasible for a house-oriented senior high school educational program. Projected enrollment capacity for 1984-85 to be 1,450, including 30 special education students.

The task group which considered this at CEFPI's June 1975 Northeast Regional Conference included:

John T. Lecky, Director of Facility Planning, Newark (New Jersey) School District

Russell W. Faust, Lakeland Central School District, Shrub Oak, New York

William D. Curzie, Jr., Educational Consultant, Bureau of Facility Planning, New Jersey State Department of Education, Trenton

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Karl H. Dickl, Principal (Grades 9-10), Stroudsburg (Pennsylvania) High School

Warren I. Paul, Environmental Design Group for Education, York, Pennsylvania (Task Group Coordinator)

Before agreeing that an "interactional" house plan seemed the most feasible, the group for an unusually long time considered effects of many economic, program, staff attitudinal, and other factors involved. During the conference's closing session, Dr. William W. Chase, CEFPI President, observed that such time for consideration was well spent, since developing a philosophy to guide direction in a given situation could lead to an effective plan. The task group feels that within the given constraints (particularly low cost and disciplinary cohesion; see page 8), the plan described in this report could be effective for the particular school under study.

I. GENERAL INFORMATION

NOTES ABOUT HOUSE PLANS

General Types

A "house" can be defined as a sort of "school within a school" wherein educational programs, functions, and facilities are arranged to encourage extensive consideration of every student as an individual from the standpoints of (him- or her-) self, teachers, administrators, and the institution. The primary emphasis is intended to be on individuals and small groups.

At least three general types can be identified:

--Horizontal. That is, by grade or grade grouping. An example would be a two-house school, one house with grades 9 and 10 and the other with grades 11 and 12.

--Vertical. This could be a microcosm of the house or of the school. Example: a school's grades 9, 10, 11, and 12 are divided as closely as possible into two or more houses; students are assigned so that each house has a student population as equal as possible academically, physically, and affectively to all of the other houses, and each house would have as closely as possible the same number of 9th graders, 10th graders, 11th graders, and 12th graders.

--Programmatic. If desired and/or feasible, a school's houses could be organized by program. For example, all college preparatory students could be assigned to one or more houses focusing on that program, all vocationally oriented students could be placed in one or more houses with that concentration, and so forth.

Other types probably can be developed according to the need or desirability for them. Indeed, one such -- an interactional plan -- is described later in this report.

As with any educational arrangement, both advantages and disadvantages can be identified. Two disadvantages could be that (1) students' involvement in house activities could reduce their identification with and overall participation in whole-school concerns, and (2) costs can increase through duplication (e.g., by buying two or more items of science equipment -- one for each house -- instead of one for the school).

On the other hand, two advantages could be that (1) fewer people in a house could mean more teacher time for each student and less chance for an individual student to be lost in a mass of students, and (2) student involvement in academic and other activities can be heightened through structured inter-house competition.

Other Considerations

Within the overall school, functions can be centralized or localized within houses as appropriate. Feasibility and cost factors, for example, may dictate only one centralized gymnasium and instructional materials center (IMC), or one food service area. Or, service-to-student considerations might lead to putting a separate (or subordinate) administrative office in each house as well as centrally in the school. Or the administrative staff might be centralized while counselors are located in each house.

The numbers of students within a house can vary depending on the school's program and administrative provisions and resources overall as well as by house. Some educators feel that 200 to 400 would be an effective range, but 500 to 600 could also be feasible. Certainly, as Professor R. B. Dierenfield observed in the May 1975 Phi Delta Kappan ("Personalizing Education: The House System in England," page 607):

> "...The houses or units should be small enough to permit achievement of the pastoral care function for which they were established. Several large American high schools have set up what are called 'schools within schools.' One of these divided a student body of 4,000 into four houses of 1,000 students each! While this was a step in the right direction, it did violence to the basic idea of small groups where personal acquaintance is fostered and individual attention made possible."

Well-designed house plans and programs can do much to heighten academic and administrative effectiveness and individual self-worth, all priority goals at any time.

II. FACTORS AFFECTING THE TASK

BASIC SPECIFICATIONS FOR SPACE

Teaching and Learning Areas

Basically, teaching-learning areas (e.g., classrooms, other learning spaces) should be provided in each house. Elective areas can be in houses or in centralized spaces, but ease of access as well as cost should be among the key consideration factors. The Program of Studies of the school can be used as a checklist.

Centralized spaces should include facilities for at least physical education, music, industrial arts, and home economics activities, and possibly space for art, an auditorium, foreign languages, large group instruction (LGI), business education and typing, and special education as well.

The instructional materials center (IMC) could be a centralized space or split among/between the houses.

Support Facilities

Space in the houses or in a centralized location must be provided for lockers, storage, teacher planning, administration, guidance counseling, health facilities, lavatories, food service, faculty room(s), and custodial/mechanical facilities. Space could well be provided for such activities as a student commons and/or lounge, and special co-curricular activities (e.g., a photographic darkroom, or a greenhouse).

Specialized Exterior Considerations

In addition to concern for minimal maintenance and appropriate access to fenestration, specialized exterior considerations should include:

- --Sheltered busing areas.
- --Athletic fields and recreational provisions.
- --Suitable pedestrian and vehicular traffic patterns.
- --Staff and senior student parking.
- --Site illumination.
- --Outside curricular activities.
- --General aesthetics, including landscaping

II. FACTORS AFFECTING THE TASK

THE HIGH SCHOOL'S OPEN EDUCATION CONCEPT

Meeting in committees, the high school's teachers and administrators during the 1974-1975 academic year agreed upon this synthesized concept of open education:

> "Open Education is an attitude and an atmosphere of freedom with responsibility, in which individual needs are recognized, the desire to learn stimulated, and the opportunities for success increased by providing choices for students students and staff. Such choices may include curriculum, technique, grouping, and scheduling."

UP FROM THE FLEXIBLE MIDDLE SCHOOL: TRAUMATIC STEP?

Consider the comparisons on the following page. Then also consider: Beginning in September 1975, will the move from the open environment of the new middle school to the traditional environment of the present Community High School be a traumatic experience for 9th graders? Might it cause increased vandalism, dropping out, and/or interpersonal disciplinary, social, emotional adjustment, and/or other problems?

ITEM	COMMUNITY MIDDLE SCHOOL	COMMUNITY HIGH SCHOOL
Year	Opened September 1974	Built 1927; Additions 1959, 1965
Enrollment	1,127 (capacity: 1,751)	1,118 (capacity: 1,453)
Administrative Organization and Grade Levels	(Teams.) Two vertical houses, each with one-half of grades 5,6,7,8. Students assigned so that each house is as equal as possible with regard to pupil mental and physical capabilities and characteristics.	(Academic Departments.) Two horizontal houses, one with grades 9 and 10, the other with grades 11 and 12. Each house has a principal, and an assistant superintendent coordinates the two.
Type of Environment	Open Space, except for certain areas such as music, physical education, and part of industrial arts. Carpeted floors. Several small dining areas. (District's central kitchen is in this school.) Excellent lighting. Plentiful equipment and support materials. Swimming pool. Library a part of the centralized IMC. Books on carts movable to learning areas.	Closed spaces, fragmented. Self-contained classrooms. No carpeting. Each house has a dining area (one a converted study hall, the other an uninspiring basement cafeteria space) and a satellite kitchen. Lighting often poor, especially in older section. One house has little equipment or support materials. No pool. Library in older section.
Special Problems	Some noise, occasional visual distraction.	Teachers resent house plan sundering departmental integrity, aggravated by awkward distance between the houses' building sections. Distances also often causes students having to go from one house to another for a class to be late. Heating fluctuates between very hot and none, especially in the older section. Only one counselor per house (i.e., 1:604 & 1:500).
Methodology	Vertical and horizontal team teaching and planning. Many audiovisuals. Much group work and encouraged and supervised individual study. Mixed teacher-student volleyball teams are standard.	Lecture, some small group work; individual study varies. Audiovisuals spotty. Fairly heavy discipline. Mixed teacher-student teams rare or nonexistent. Planetarium unused except by the one teacher qualified to operate the projector. Excellent art program.
Student Curricular Options	With parental and advisor consultation, student can select one topic each for 12 five-week "Exploratory Programs" activities during a year. No grades are given; periods are 55 minutes daily, after the fundamental academic requirements have been experienced. Many	Some options in course selection when student and counselor are setting up the student's program. (E.g., electives.)

II. FACTORS AFFECTING THE TASK

SCHOOL, COMMUNITY, MONEY

As may be seen particularly by reading the previous section entitled "Up From The Middle School: Traumatic Step?", for students and the high school teachers, particularly, affective as well as the more usual physical. economic, academic, and political considerations were and are involved.

Originally, those pages were part of a "Basic Educational Specifications for a House Plan, Senior High School" that briefly set forth, for perspective, certain existing constraints and resources. That working document was developed specifically for the task group and the conference; it also included descriptions of the school's educational philosophy (essentially student-oriented, with some acceptance of open education ideas) and curriculum (essentially traditional and disciplinarily compartmented). Relevant community characteristics, too, were cited, e.g.: Tourism and light industry are the economic mainstays. District students are more than 95 percent Caucasian and 4.4 percent Negroid. More than 40 percent of the area's families have annual incomes of less than $9,000. There is a highly conservative and strongly established group of local retail and service businessmen. Many of the area's families have only one parent.

One overriding conclusion had to be that in view of the very recent large outlay for the new middle school, the recession, the essential fiscal conservatism of the community's businessmen. and the possibility of enrollments declining over the next ten years, money for any but the most basic improvements probably would not be forthcoming. Thus for this situation the normally valid ideas of razing all or part of the school and constructing a more compact building with closer proximities had to be put aside.

That left the question: What house plan, if any, using the existing building complex would be at the same time the most economical and the most compatible with students, staff, administrators, and program?

II. FACTORS AFFECTING THE TASK

HOUSE PLANS PRO AND CON

The major complications to be resolved as compatibly as possible were identified by the task group as:

1. Keeping costs as low as possible.
2. Establishing disciplinary cohesion through departmental proximity, while clustering related disciplines to encourage inter-disciplinary curricular activities and integration of student learnings.
3. Providing for small groups, extracurricular if not regular curricular, co-curricular, curricular (e.g., "Exploratory Program" groups similar to those in the middle school; see page 6).
4. Arranging for even utilization of facilities, so that every student is scheduled almost every day to attend classes in both buildings but must move between the two no more than twice daily.

Four house plan options were considered:

A. Vertical, B. Horizontal, C. Programmatic, D. Interactional (Functional

A. The Vertical Option

Two vertical houses (each 9-12) could offer interesting possibilities for constructive competition, the group agreed, and might provide certain administrative and comparative-evaluation advantages. Also, movement between the buildings would be reduced considerably, at least for academic activities. But the extensive renovation that would be needed to bring the older building's facilities to a standard comparable with those of the newer building would cost more than the community would be willing to pay, thought the group. Without such renovation, half the students would be forced to stay all their secondary days in a facility many could see as poor by contrast with the newer building. The group felt that this could lead to disciplinary problems and parental complaints of discrimination. Of

course, houses could swap buildings every year, but that could create complications in administrative scheduling and teacher and student adjustments. Another disadvantage would be the dividing of all academic areas into two parts, hindering disciplinary coordination even though enhancing opportunities for small-scale interdisciplinary activities. At any rate, the group rejected the vertical option.

B. The Horizontal Option

This would retain the current arrangement which most teachers and many students oppose strongly. Two advantages are that for academic classes, students would be in each building for two years and that grouping by related grade (i.e., all 9th and 10th, all 11th and 12th) helps administrative coordination of students. The group felt, however, that these good points were more than offset by three major disadvantages: (1) Dividing departments physically inhibits their disciplines' cohesion and coordination, including planning. (2) Students in the new building "house" still must attend many activities -- physical education, library, art, home economics, etc. -- in the old building, which requires many to move fast yet still risk being late to class. (3) Renovating even the old building to provide a more attractive cafeteria space, a more centralized library, and facilities to encourage activities oriented toward small groups and individuals would cost more than the community would -- from all indications -- be willing to pay.

C. The Programmatic Option

In the task group's opinion, assigning students to houses by educational program could facilitate program relationships. But a programmatic arrangement could also divide the student body unhealthily by leading to negative group attitudes (e.g., "We college prep majors are better than you vocational types."), and behavioral disciplinary problems. This option, too, the task group rejected.

D. The Functional-School-With-Interaction-Houses Option

Under this option, the school would have two dimensions, functional and interactional. (1) In the functional dimension, academic disciplines and other academic areas would be organized by department, departmental planning and teaching areas for all four grades would be located together, related departments would be clustered close to each other, and -- to encourage curricular integration and interdisciplinary activities -- all concerns and responsibilities with regard to teaching and learning experiences and counseling would be under the school's curriculum principal. All other functions, including behavior-related discipline, and scheduling based on stated staff, student, and program needs, would be under the school's administrative principal. Any conflicts would be resolved by the district superintendent or, if assigned, the district assistant superintendent. (2) In the interactional dimension, the 1,450 students and 62 teachers in grades 9-12 would be organized into up to 58 heterogeneous groups, each with 25 students and one faculty member. The groups would be placed by the administrative principal into two, three, or four vertical Interaction Houses or two horizontal Interaction Houses, with each house under a student-faculty Steering Committee. Groups would involve intramural sports or shared sport or nonsport curricular-related or extracurricular-type interests intended to heighten every student's growth through interaction. Groups would meet at least once weekly (often more frequently) and be in existence one or more quarters or semesters throughout the school year. Every student would be required to select an activity and be assigned to a group; the activity might change later, but each student would be expected to be involved in some Interactional House activity throughout the school year.

The task group identified two potential disadvantages. One is the possibility of a student being "lost in the mass" through an administrative breakdown, although that could happen with most systems. The other would be that a student's daily movement between the buildings could be excessive unless scheduling would be computerized carefully.

What persuaded the group to recommend this option, however, were the overriding identified advantages; the arrangement meets all the major complications identified on page 8 and then some in that it:

- keeps costs down by minimizing renovation (much of the old building is sound) and new construction.
- encourages related and interdisciplinary academic concerns through physical clustering and curricular coordination and supervision.
- achieves a major house goal by providing for small groups to give even insecure students opportunities for self-growth through involvement.
- reduces the potential "stigma" of being mostly in one building by arranging for every student to attend classes in both buildings daily.
- provides some kind of satisfaction to just about every main group concerned:

  For teachers: Departmentalization is strengthened.

  For students: Individualization is encouraged; learning can occur in both buildings but without being undermined by excessive movement; the basement cafeteria is eliminated; integrative curricular experiences can help put isolated discipline and learnings in perspective; social interaction is made inherent but without eliminating privacy.

  For administrators: Responsibilities are delimited by curricular and administrative concerns.

  For the board of education and the community: Construction and renovation costs are kept relatively low, yet there is provision for flexible space within clusters, which should ease transitional shock for students entering the high school from the open space middle school.

  For the State: The plan's provisions would meet State mandates.

COMPARATIVE HOUSE ARRANGEMENTS

Note: Central facilities could include spaces for physical education, music, food service, etc.

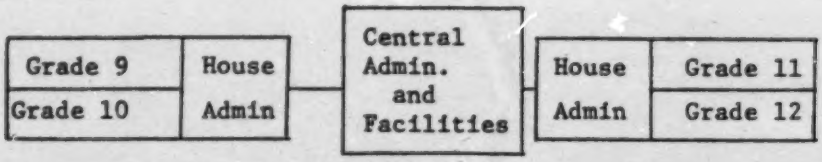


Figure 1. Example of a Horizontal House Plan

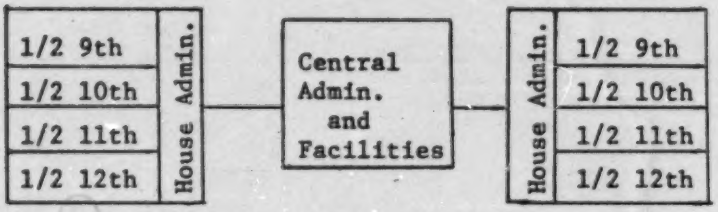


Figure 2. Example of a Vertical House Plan

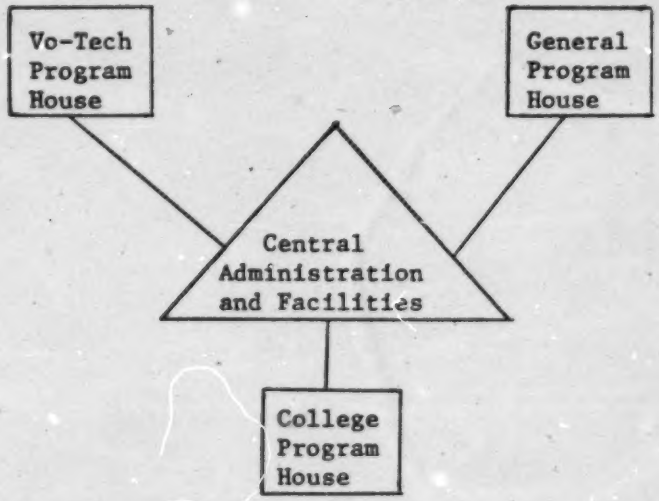


Figure 3. Example of a Programmatic House Plan.

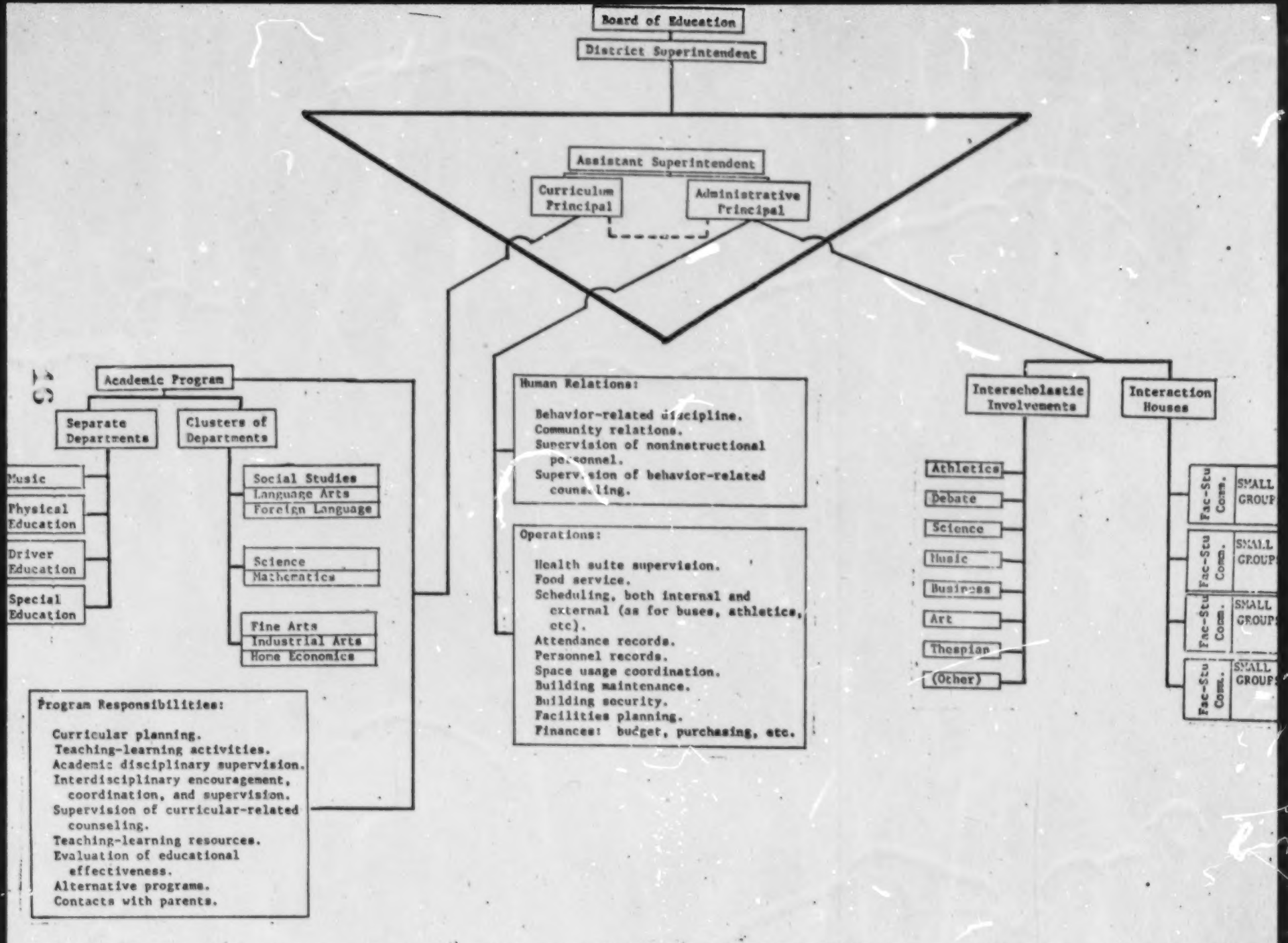


Figure 1. Example of a Functional School with Interaction-Houses Plan

III. FUNCTIONAL SPACE FOR INTERACTION HOUSES

GENERAL CONSIDERATIONS

Although one constraint was to keep costs low, certain renovations should take place as soon as possible. Examples: Improvement of the heating system in the old building. Remodeling of the food service area to reunite the new building's serving and dining area.

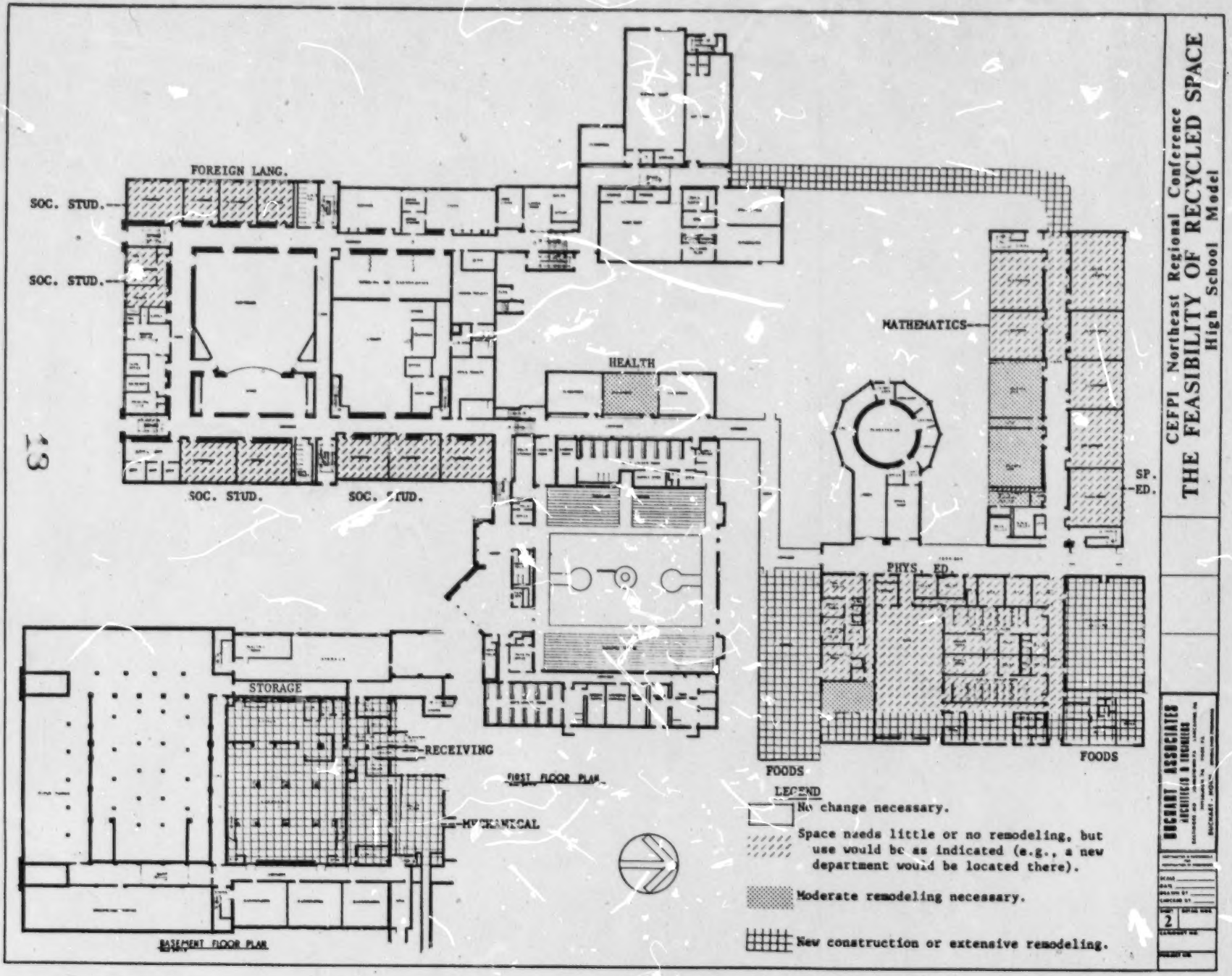
Such facilities as the library (instructional materials center) and the auditorium probably would have to stay where they are. Truly centralized facilities would require extensive remodeling or new construction, and that would require considerable money.

PHYSICAL MODIFICATIONS

The task group's recommendations, as shown on the floor plans on the subsequent pages, were as follows:

Spaces To Be Retained As Is

FLOOR	OLD BUILDING
1+2	Auditorium and Stage.
1	Administrative space for Administrative Principal, District Assistant Superintendent, etc.
1	Faculty lounge spaces.
1	Fine Arts, Industrial Arts, and Home Economics Departments, all in an Arts/Home Economics cluster.
1	Entrance
1+2	The main Physical Education space, including the gymnasium.
2	Music Department
Basement	Driver Education Department
Basement	The unfinished part.
All	Lavatories
	NEW BUILDING
Both	Lavatories
1	Entrance


FOREIGN LANG.
SOC. STUD.
SOC. STUD.
SOC. STUD.
SOC. STUD.
HEALTH
MATHEMATICS
SP.
ED.
PHYS. ED.
FOODS
FOODS
STORAGE
RECEIVING
MECHANICAL
FIRST FLOOR PLAN
BASEMENT FLOOR PLAN
LEGEND
No change necessary.
Space needs little or no remodeling, but use would be as indicated (e.g., a new department would be located there).
Moderate remodeling necessary.
New construction or extensive remodeling.
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High School Model
BUCHART ASSOCIATES
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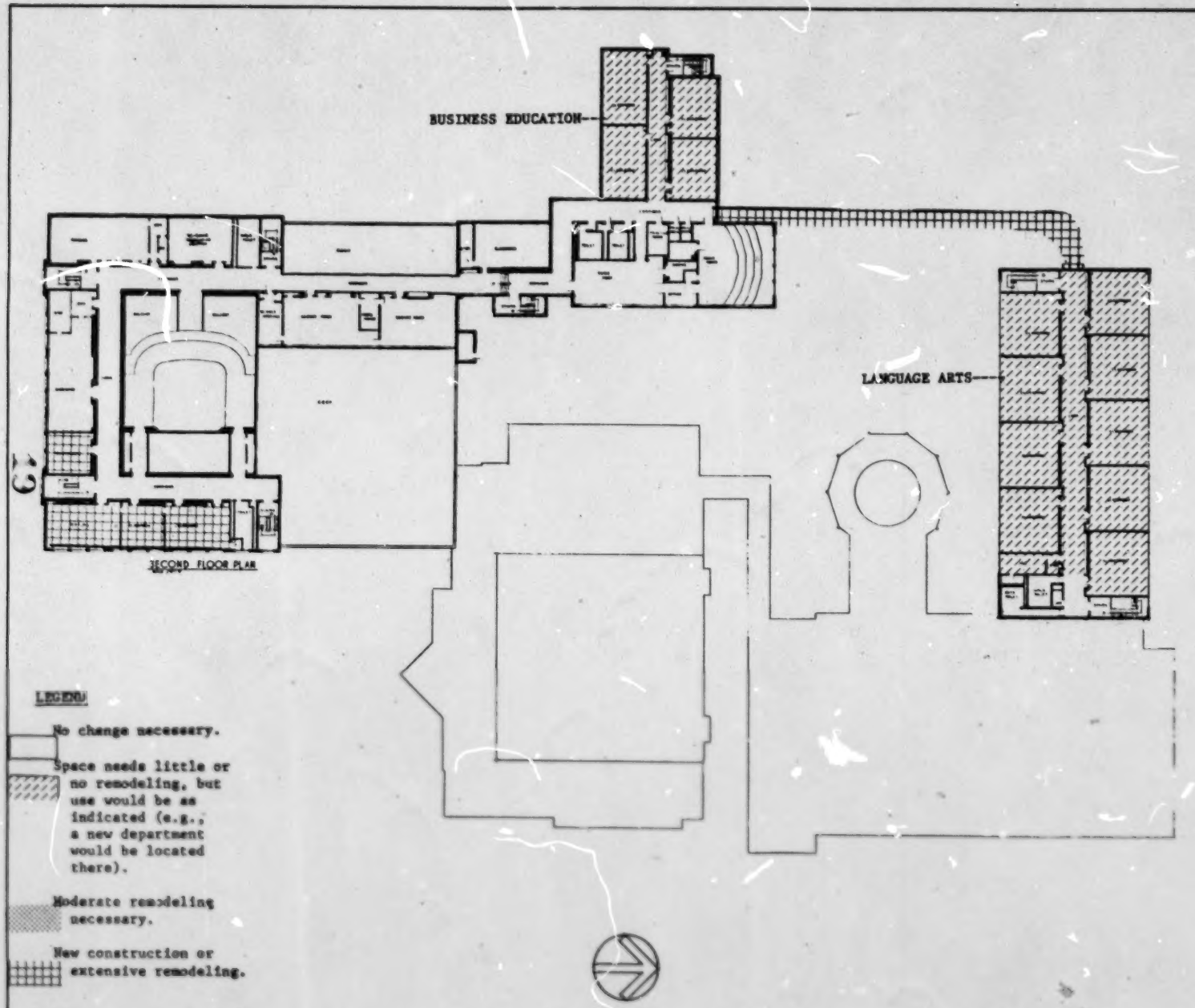
BUSINESS EDUCATION
LANGUAGE ARTS
SECOND FLOOR PLAN
LEGEND
No change necessary.
Space needs little or no remodeling, but use would be as indicated (e.g., a new department would be located there).
Moderate remodeling necessary.
New construction or extensive remodeling.

CEFPI Northeast Regional Conference

THE FEASIBILITY OF RECYCLED SPACE

High School Model

Spaces To Be Remodeled Minimally For New Occupants

FLOOR	OLD BUILDING
1	3 classrooms across from the rear of the auditorium, for Foreign Language Department.
1	7 classrooms for Social Studies Department (grades 9-12) as follows: (1) Corner classroom to the left of Foreign Language Department, newly located as described just above. (2) The space where now is the Health Suite to be remodeled into a classroom. (3) The 4 classrooms to the right of where the District Assistant Superintendent's Administrative space is now.
1	Planetarium, retained untouched except that the "Lobby" (presently housing audiovisual storage and a photocopier) and the adjacent "Space Shop" (now used as a social studies classroom) would be remodeled into two classrooms for the Science Department (grades 9-12). Audiovisual storage and repair would be moved to an expanded library (IMC) area.
1	3 classrooms across the corridor from the main Physical Education space, for Health. The 2 outer classrooms would be for Health Education, while the middle one, considerably remodeled, would become the new, centralized, Health Suite.
2	4 classrooms across the corridor from the Music area for the Business Education Department (grades 9-12). One room would have to be remodeled into a typing room.
2	The present Science area, expanded for the Science Department (grades 9-12) to cover <u>all</u> second-floor teaching-learning spaces to the left of the Music Department. This would include the Business Education Department's present 3 classrooms and typing room, all of which would have to be remodeled.
	NEW BUILDING
1	6 classrooms for the Mathematics Department (grades 9-12).
1	1 classroom, near the primary entrance, for Special Education.
2	9 classrooms for the Language Arts Department (grades 9-12).

Spaces To Be Partially or Wholly Remodeled Extensively

FLOOR	OLD BUILDING
1	Enlarge the instructional materials center (IMC) to include space for audiovisual storage and photocopy reproduction as well as the library and small reading/meeting rooms.
Basement	Make the food service receiving area over into a mechanical room receiving area.
Basement	Enlarge the Mechanical space to approximately double its present width by taking over the open space and small storage space to its left. Consider making this a centralized heating source for the entire school (both buildings).
	NEW BUILDING
1	Remodel the spaces where the 2 science laboratories and the instructional planning center now are to be the new area for Guidance and the school Curriculum Principal's administrative space.
1	Remodel and expand the present adaptive/auxiliary gymnasium to include what is now the Mechanical Room and the 9th-10th house principal's administrative space. (The mechanical function should be moved to the centralized old-building basement space.)
1	Move the District Superintendent out of his present office suite to the separate smaller building the District owns a few blocks away. This area will become part of the remodeled food service area.
1	Establish a single food service area for the entire school by: (1) Expanding and remodeling the present new-building dining area to include what is now the District Superintendent's office suite. (2) Connecting the serving area referred to in (1), just above, with a new serving area to be built (see "New Construction," below). The connection should be through the present serving kitchen - dishwashing room-locker space area between the adaptive/auxiliary gymnasium and the outside wall.

New Construction

FLOOR	NEW BUILDING
1	Build a new food service dining space in the present outside area just below the covered walkway connecting the two buildings. This new space is to be connected through the kitchen to the other dining area.
2	Construct a covered elevated walkway connecting the second floor (at the end toward the athletic fields) with the old building's second floor corridor by the present Music space. Ensure that the walkway is high enough to allow trucks to drive under to go to the centralized mechanical space in the basement of the old building.

III. FUNCTIONAL SPACE FOR INTERACTION HOUSES

ADMINISTRATIVE RESPONSIBILITIES

Scheduling and supervision certainly would be among the administrative responsibilities for the Interaction Houses. Small groups of, say, 25 could meet in classrooms, while combined groups of up to 800 persons could meet in the auditorium. Computer programs probably would be necessary to cope with schedule complexities.

Moreover, even though the small groups would be designed to encourage students' growth and expression, the school's counseling must be kept both readily available and professionally strong to meet any individual student's needs for career guidance and help with personal problems.

Provided the administrators and the teachers can work together professionally and effectively, the constraints of this particular school situation can be surmounted to ensure the success of the Interaction House arrangement for the benefit of every student.

APPENDIX

BASIC EDUCATIONAL SPECIFICATIONS
FOR A
HOUSE PLAN, SENIOR HIGH SCHOOL
(Task Group Working Document)

"THE FEASIBILITY OF RECYCLED SPACE"
Regional Conference, June 4-6, 1975

Sheraton Heights Hotel
Hasbrouck Heights, N.J.

NORTHEAST REGION
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I. GENERAL INFORMATION

PREFACE

The task for which these "Basic Educational Specifications" have been developed is to consider an existing building complex and recommend or suggest ways it can be modified, remodeled, or otherwise changed to be feasible for a house-oriented senior high school educational program.

A set of floor plans of the existing building will be provided the task force, along with basic materials. All other necessary information is included herein, can be obtained from task force members, or will be made available by the task force coordinator.

As may be seen particularly by reading the Chapter II section entitled "Up From The Middle School: Traumatic Step?", affective as well as the more usual physical, economic, academic, and political considerations are involved.

The task is a challenge. But consider it also an opportunity to be creative, synergistic, future-oriented, productive of a feasible solution. Shall we begin?

Warren I. Paul, Ph.D.
Task Force Coordinator

I. GENERAL INFORMATION

NOTES ABOUT HOUSE PLANS

General Types

A "house" can be defined as a sort of "school within a school" wherein educational programs, functions, and facilities are arranged to encourage extensive consideration of every student as an individual from the standpoints of (him-/her-) self, teachers, administrators, and the institution. The primary emphasis is intended to be on individuals and small groups.

At least three general types can be identified:

--Horizontal. That is, by grade or grade grouping. An example would be a two-house school, one house with grades 9 and 10 and the other with grades 11 and 12.

--Vertical. This could be a microcosm of the house or of the school. Example: A school's grades 9, 10, 11, and 12 are divided as closely as possible into two or more houses; students are assigned so that each house has a student population as equal as possible academically, physically, and affectively to all of the other houses, and each house would have as exactly as possible the same number of 9th graders, 10th graders, 11th graders, and 12th graders.

--Programmatic. If desired and/or feasible, a school's houses could be organized by program. For example, all college preparatory students could be assigned to one or more houses focusing on that program, all vocationally oriented students could be placed in one or more houses with that concentration, and so forth.

Other types probably could be developed according to the need or desirability for them.

As with any educational arrangement, both advantages and disadvantages can be identified. Two disadvantages could be that (1) students' involvement in house activities could reduce their identification with and overall participation in whole-school concerns, and (2) costs can increase through duplication (e.g., by buying two or more sets of science equipment -- one for each house -- instead of one for the school).

On the other hand, two advantages could be that (1) fewer people in a house means more teacher time for each student and less chance for an individual student to be lost in a mass of students, and (2) student involvement in academic and other activities can be heightened through delimited inter-house competition.

Within the overall school, functions can be centralized or localized within houses as appropriate. Feasibility and cost factors, for example, may dictate only one centralized gymnasium and instructional materials center (IMC), or one food service area. Or, service-to-student considerations might lead to putting a separate (or subordinate) administrative office in each house as well as centrally in the school. Or the administrative staff might be centralized while counselors are located in each house.

The numbers of students within a house can vary depending on the school's program and administrative provisions and resources overall as well as by house. Some educators feel that 200 to 400 would be an effective range, but 500 to 600 could also be feasible. Certainly, as Professor R. B. Dierenfield observed in the May 1975 Phi Delta Kappan ("Personalizing Education: The House System In England," page 607):

> "...The houses or units should be small enough to permit achievement of the pastoral care function for which they were established. Several large American high schools have set up what are called 'schools within schools.' One of these divided a student body of 4,000 into four houses of 1,000 students each! While this was a step in the right direction, it did violence to the basic idea of small groups where personal acquaintance is fostered and individual attention made possible."

Well-designed house plans and programs can do much to heighten academic and administrative effectiveness and individual self-worth, all priority goals at any time.

II. PROGRAM PERSPECTIVES

COMMUNITY

Community is located in the northeastern United States. As of January 1975, slightly more than 17,000 persons were living in Community and the surrounding townships which comprise the Community Area School District. Population projections indicate that the population will increase to 24,400 by 1985.

Tourism and primarily diversified light industry are the economic mainstays of the Community area and indeed of Mountain County, of which Community is the county seat. Manufacturing is not extensive, but its industries do pay a wage rate higher than those of the area's service or retail trade enterprises. Mountain County has many trees on its rugged terrain, but, while beautiful, they are of small commercial value. Little of the area is usable for farming, and few mineral deposits have been found. The area does have good highway and rail access and many natural lakes. Since the early 1800's the area's commercial recreation development has brought a steady growth of population and employment.

The area's climate is generally moderate, with average temperatures ranging from 28.1°F. in January to 72.8°F. in July. The highest recorded was 104°F. in 1955, and the lowest -36°F. in 1943. The average daily humidity is 45%; humidity may climb at night to 85% but cool due to heat dissipation by large areas of green trees.

Ethnically, the population of the Community area is fairly homogenous, with mostly Germanic backgrounds. Approximately 80 percent of the area's almost 6,000 families are "WASP" (white anglo-saxon Protestant), approximately 10 percent (about 600 families) are Roman Catholic, between 5 and 9 percent are Jewish, and the remainder are members of other ethnic minorities, including blacks. In the school district, more than 95 percent of the 3,500 students are Caucasian, 4.4 percent are Negroid, and the remainder are members of other races.

Socioeconomic orientations range from a highly conservative and strongly established group of local retail and service businessmen to several faculty members and students of the small junior college in Community and moderate-sized college five miles to the northeast, from year-round business employees to factory workers, from a number of retirees to high school and college students employed part time. Resort businesses also have a high seasonal employment, which has led to discussion regarding the value of imposing a District per capita tax. Ranked by market value per student, of the state's 525 school districts, Community is in the top third. Nevertheless, Community does not really have a broad base of middle income families, since more than 40 percent of its families have annual incomes of $9,000 or less. A very few families have large annual incomes.

Moreover, many homes house one-parent families, which school officials feel is a major factor causing or aggravating many of the high school students' personal adjustment problems.

Educationally, more than half of the area's year-round residents over 21 years of age are high school graduates. Community Area School District has six elementary schools, five public and one supported by the Seventh Day Adventist Church. There is one new, open space, public middle school (grades 5,6,7,8) and one public high school (grades 9,10,11,12). During the school year, 180 of the high school's students attend the County Vocational-Technical School, 90 in the morning sessions (returning to the high school in the afternoons) and 90 in the afternoons (after attending morning classes in the high school). In addition, 200 elementary and 120 secondary students attend Roman Catholic parochial schools in a neighboring town. Almost 400 students are enrolled in the junior college in Community.

II. PROGRAM PERSPECTIVES

THE HIGH SCHOOL'S EDUCATIONAL PHILOSOPHY AND OBJECTIVES

Educational Philosophy

In line with the District's philosophy, the educational philosophy guiding Community High School's program has been stated since 1971 as follows:

Believing in the worth and dignity of the individual, we base our educational objectives on the philosophy that all educational facets are to develop, guide and direct the individual to a realization of his full potentialities and his correlative obligation to contribute positively to our changing environment. Education must be available to all children. The school must identify pupils who cannot be taught in the usual classroom situation and, with the assistance of other agencies in the community, provide for their treatment and special education. Therefore, education must be sufficiently broad and varied to meet the needs of all pupils.

The application of the above philosophy should enable each student to attain the objectives stated below:

1. To understand that the acquisition of knowledge is not an end in itself but a means to a fuller and richer life.

2. To acquire as varied a background and training as is consistent with the needs of the local and world communities.

3. To make a choice within the curricula with knowledge that it is his obligation to develop his potentialities.

4. To participate in a school life which will encourage the development of acceptable social habits and attitudes.

5. To develop a harmonious relationship among his mental, physical and social activities.

The High School's Educational Objectives

We desire that students of Community High School should become socially adjusted and tolerant, and that they develop morally wholesome personalities. We believe that it is our duty to appraise pupils' skills and talents and to guide them into channels which will lead to self-satisfaction and yet redound to the benefit of the social group, the community, the nation as a whole. We recognize that the pressures of modern living make necessary more and more emphasis on mental hygiene, and therefore on the leisure arts in aesthetic living. We know that men and women, more than ever before, need to better understand themselves and their environment. We feel that pupils, faced with a world in which words and symbols are used to mislead as well as to direct, need to learn to think clearly and feel that democracy, though it assures his right and privilege to develop himself in every way possible, yet demands that much development be dedicated to the interests of the many; that in our devotion to individuality we do not lose our unity and common purpose.

Therefore we wish

a. To help the student understand that the acquisition of knowledge is not an end in itself but a means to a fuller and richer life.

b. To provide as varied a background and training for our students as is consistent with the needs and ability of our community.

1. To provide a program of study for college preparation which will meet the entrance requirements of secondary school accrediting agencies of the United States.

2. To offer courses of study in business education which will give practical training in ethics, methods, and skills necessary to meet the most exacting demands of employers.

3. To give training in industrial arts which will help boys explore their abilities and interests, and look to work after high school.

4. To offer vocational home economics so that girls may be trained for worthy, efficient home membership and family and community living.

5. To provide a rich program in general education of practical value and of personal worth with the understanding that the school does not subscribe to unmerited promotions.

c. To provide guidance in reading skills and the formation of good habits of learning and study.

d. Always to direct our teaching, especially in art, music and speech, above the general popular levels and to encourage the kind of skepticism that promotes increasing taste in looking, listening, writing and speaking.

e. To allow reasonable freedom of choice among our offerings but with full knowledge that it is our obligation to develop evident talent even when choice may therefore be prohibited.

We accept our obligation to help the student become mature and socially adjusted by

a. Helping him better understand himself in his relationships with others his own age, his family, and people in authority.

b. Dwelling on the place of poise, etiquette, conversation in life.

c. Offering an extracurricular program of the size and scope wanted by staff and students alike which will aid in personal and social adaptations, yet which in no way removes from the home and the community their responsibility in this area.

d. Organizing and supervising the kind of school life which will encourage the development of good habits and attitudes.

We acknowledge

the obligation to provide opportunity for individuals and for groups to act in situations that are physically wholesome, mentally stimulating and satisfying, and socially sound.

We subscribe

to the doctrine that democracy grows through fair-minded, unbiased analysis and criticism. Therefore we must encourage discussion in controversial areas, with faith that well-trained minds ultimately make sound decisions, that grave questions of sweeping social implication can be decided only by continuing discussion.

to the principle that students must experience democracy before they can practice it. Therefore, we shall request before we insist; we shall encourage student participation in development of school policy and regulation through the Student Council.

to the belief that the administration of a school is a cooperative venture in which pupils, teachers, administrators, and directors work democratically and harmoniously to promote an adequate educational program for the community and the most efficient use of the school plant.

We further believe

that to maintain continuity of educational growth, a philosophy of education must be liberal and changing, adaptive to the needs and the tempo of the times.

II. PROGRAM PERSPECTIVES

THE HIGH SCHOOL'S OPEN EDUCATION CONCEPT

Meeting in a group of committees, the high school's teachers and administrators during the 1974-1975 academic year agreed upon this synthesized concept of open education:

> "Open Education is an attitude and an atmosphere of freedom with responsibility, in which individual needs are recognized, the desire to learn stimulated, and the opportunities for success increased by providing choices for students and staff. Such choices may include curriculum, technique, grouping, and scheduling."

UP FROM THE FLEXIBLE MIDDLE SCHOOL: TRAUMATIC STEP?

Consider the comparisons on the following page. Then also consider: Beginning in September 1975, will the move from the open environment of the new middle school to the traditional environment of the present Community High School be a traumatic experience for 9th graders? Might it cause increased vandalism, dropping out, and/or interpersonal disciplinary and other problems?

ITEM	COMMUNITY MIDDLE SCHOOL	COMMUNITY HIGH SCHOOL
Year	Opened September 1974	Built 1927; Additions 1959, 1965
Enrollment	1,127 (capacity: 1,751)	1,118 (capacity: 1,453)
Administrative Organization and Grade Levels	(Teams.) Two vertical houses, each with one-half of grades 5,6,7,8. Students assigned so that each house is as equal as possible with regard to pupil mental and physical capabilities and characteristics.	(Academic Departments.) Two horizontal houses, one with grades 9 and 10, the other with grades 11 and 12. Each house has a principal, and an assistant superintendent coordinates the two.
Type of Environment	Open space, except for certain areas such as music, physical education, and part of industrial arts. Carpeted floors. Several small eating areas. (District's central kitchen is in this school.) Excellent lighting. Plentiful equipment and support materials. Swimming pool. Library a part of the centralized IMC. Books on carts movable to learning areas.	Closed spaces, fragmented. Self-contained classrooms. No carpeting. Each house has an eating area (one a converted study hall, the other an uninspiring basement cafeteria space) and a satellite kitchen. Lighting often poor, especially in older section. One house has little equipment or support material No pool. Library in older section.
Special Problems	Some noise, occasional visual distraction.	Teachers resent house plan sundering departmen integrity, aggravated by awkward distance between the houses' building sections. Distance also often causes students having to go from one house to the other for a class to be late. Heating fluctuates between very hot and none, especially in the older section. Only one counselor per house (i.e., 1:604 & 1:500).
Methodology	Vertical and horizontal team teaching and planning. Many audiovisuals. Much group work and encouraged and supervised individual study. Mixed teacher-student volleyball teams are standard.	Lecture, some small group work; individual study varies. Audiovisuals spotty. Fairly heavy discipline. Mixed teacher-student teams rare or nonexistent. Planetarium unused excep by the one teacher qualified to operate the projector. Excellent art program.
Student Curricular Options	With parental and advisor consultation, student can select one topic each for 12 five-week "Exploratory Program" activities during a year. No grades are given; periods are 45 minutes daily, after the fundamental academic requirements have been experienced.	Some options in course selection when student and counselor are setting up the student's program. (E.g., electives.)

III. THE CURRICULAR CONTEXT

PROGRAM OF STUDIES

GRADE NINE

BASIC PROGRAM		COLLEGE PREPARATORY PROGRAM	
English I	1	English I	1
General Mathematics I	1	Mathematics (Algebra I or Geometry)	1
General Science	1	General Science	1
U. S. History I	1	U. S. History I	1
Physical Education	-	Physical Education	-
Health	-	Health	-
Elect one:		*Language	
Art Major I	1	French I or II	1
General Business	1	German I or II	1
Homemaking I	1	Spanish I	1
**Industrial Arts--9	1		

BUSINESS AND GENERAL BUSINESS

English I	1
General Business	1
General Mathematics I	1
General Science	1
U. S. History I	1
Physical Education	-
Health	-

(ALL REQUIRED)

*May be omitted in Grade Nine with permission of the counselor. One elective must be taken from the Basic Program in its place.

**The Industrial Arts elective is recommended for boys who are planning to attend the Vocational-Technical School.

Other ninth grade boys may also elect this course.

PROGRAM OF STUDIES

GRADE TEN

BASIC PROGRAM

Required:	
English II	1
U. S. History II	1
Biology	1
Physical Education	-
Driver Education Theory	-
Health	-

Elect two:	
Art Appreciation	1
Art Major I, II	1
General Mathematics II	1
Home Economics:	
Child Study	1/2
Clothing I	1
Homemaking I	1
Homemaking II	1
Industrial Arts:	
Architectural Drafting	1
Cabinet Making	1
Ceramics	1
Creative Communications	1
Electricity	1/2
Graphic Arts	1
Leather	1/2
Machining/Cold Metal	1
Mechanical Drawing	1
Photography	1/2
Power Mechanics	1
Welding/Hot Metal	1
Wood Construction	1
Journalism I	1
Language:	
French I, II or III	1
German I, II or III	1
Spanish I, II	1
Library Theory	1/2
Music Appreciation	1
Personal Use Typing	1/2
World Geography	1

COLLEGE PREPARATORY PROGRAM

Required:	
English II	1
U. S. History II	1
Biology	1
Geometry	1
Language:	
French I, I, or III	1
German I, II, or III	1
Spanish I, II	1
Physical Education	-
Health	-
Driver Education Theory	-

(Electives may be taken from list under Basic Program)

BUSINESS AND GENERAL BUSINESS

Required:	
English II	1
U. S. History II	1
Business Mathematics	1
Biology	1
Typing I	1
Physical Education	-
Health	-
Driver Education	-

(NO ELECTIVE)

VOCATIONAL-TECHNICAL PROGRAM

Required:	
Vo-Tech Training	3
English II	1
Biology	1
Physical Education (2 periods)	-
Driver Education (1 period)	-
Health (1 period)	-

(NO ELECTIVE)

Classroom instruction in Driver Education--The Traffic Safety Program--will be incorporated in the regular schedule.

PROGRAM OF STUDIES

GRADE ELEVEN

BASIC PROGRAM

Required:	
English III	1
World History & Cultures	1
Physical Education/Health	-
Electives:	
Algebra I or II	1
Art Appreciation	1
Art I, II, or III	1
Bookkeeping I	1
Business Law	1
Chemistry	1
Earth Science	1
Ecology	1/2
Environmental Problems	1
Geometry	1
Health Assistant (Vo-Tech)	3
Home Economics:	
Advanced Clothing	1/2
Child Study	1/2
Clothing I	1
Foods I	1
Foods II	1/2
Home Decorating	1/2
Homemaking I	1
Homemaking II	1
Tailoring	1/2
Industrial Arts:	
Architectural Drafting	1
Cabinet Making	1
Ceramics	1
Creative Communications	1
Electricity	1/2
Graphic Arts	1
Leather	1/2
Machining/Cold Metal	1
Mechanical Drawing	1
Photography	1/2
Power Mechanics	1
Welding/Hot Metal	1
Wood Construction	1
Journalism I or II	1
Language:	
French I, II, III, IV, V	1
German I, II, III, IV, V	1
Spanish I, II, III	1

BASIC PROGRAM (continued)

Electives (continued)	
Library Theory	1/2
Music Appreciation	1
Personal Use Typing	1/2
*Physics	1
Recordkeeping	1
Shorthand I	1
Typing I or II	1
Psychology	1/2
World Geography	1

COLLEGE PREPARATORY PROGRAM

Required:	
English III	1
World History and Cultures	1
Physical Education/Health	-
Recommended Electives:	
*Chemistry	1
Languages:	
French I, II, III, IV	1
German I, II, III, IV	1
Spanish I, II, III	1
Mathematics (Algebra II)	1
*Physics	1

BUSINESS PROGRAM

Required:	
English III (Business)	1
World History and Cultures	1
Bookkeeping I	1
Shorthand I	1
Typing II	1
Physical Education/Health	-

(Elect at least one from under Basic Program)

*Graduation in the College Preparatory Course requires chemistry or physics

**See prerequisite

PROGRAM OF STUDIES

GRADE ELEVEN

GENERAL BUSINESS PROGRAM

Required:	
English III (one-year literature; one-half year business communications)	1
World History and Cultures	1
Bookkeeping I or Shorthand I	1
Typing II	1
Physical Education/Health	-

(Elect one from Basic Program)

VOCATIONAL-TECHNICAL PROGRAM

Required:	
Vo-Tech Training	3
English III	1
Mathematics II	1
World History/Cultures (4 periods)	1
Physical Education (1 period)	-

(NO ELECTIVES)

Behind-the-wheel training in Driver Education may be elected in any program in Grade Eleven if student meets age requirement. Arrangements will be made early in the first and second semester.

PROGRAM OF STUDIES

GRADE TWELVE

BASIC PROGRAM

Required:	
English IV	1
Senior Social Science	1
Physical Education/Health	-

Electives:	
Advanced Biology	2
Advanced Mathematics	1
Anthropology	1/2
Art Appreciation	1
Art Major I, II, III	1
Bookkeeping I or II	1
Business Law	1
Calculus	1
Chemistry I or II	1
**Clerical Practice	1
Earth Science	1
Ecology	1/2
Environmental Problems	1
Home Economics:	
Advanced Clothing	1/2
Child Study	1/2
Clothing I	1
Foods I	1
Foods II	1/2
Home Decorating	1/2
Homemaking I	1
Homemaking II	1
Singles Living for Boys	1/2
Tailoring	1/2
Industrial Arts:	
Architectural Drawing	1
Cabinet Making	1
Ceramics	1
Creative Communications	1
Electricity	1/2
Graphic Arts	1
Leather	1/2
Machining/Cold Metal	1
Mechanical Drawing	1
Photography	1/2
Power Mechanics	1
Welding/Hot Metal	1
Wood Construction	1
Journalism II	1

*Graduation in the College Preparatory Program requires Chemistry or Physics.

BASIC PROGRAM (continued)

Electives: (continued)	
Language:	
French I, II, III, IV, V	1
German I, II, III, IV, V	1
Spanish I, II, III	
Library Theory	1/2
Music Appreciation	1
Personal Use Typing	1/2
*Physics I or II	1
Psychology	1/2
Recordkeeping	1
Senior Mathematics	1
Shorthand I or II	1
Typing I or II	1
World Geography	1

COLLEGE PREPARATORY PROGRAM

Required:	
English IV	1
Senior Social Science	1
Physical Education/Health	-

Recommended Electives:	
**Advanced Biology	2
Advanced Mathematics	1
Calculus	1
*Chemistry I or II	1
Language:	
French I, II, III, IV or V	1
German I, II, III, IV or V	1
Spanish I, II, III	1
*Physics I or II	1
Senior Mathematics	1

(Electives may be taken from list under Basic Program)

BUSINESS PROGRAM

Required:	
English IV (Business)	1
Senior Social Science	1
Bookkeeping II	1
Shorthand II	1
Office Practice	1
Physical Education/Health	-

(NO ELECTIVES)

PROGRAM OF STUDIES

GRADE TWELVE

GENERAL BUSINESS PROGRAM

Required:	
English IV (Business)	1
Senior Social Science	1
Shorthand II or Bookkeeping II	1
Office Practice	1
Physical Education /Health	-

(Elect one from Basic Program)

VOCATIONAL-TECHNICAL PROGRAM

Required:	
Vo-Tech Training	3
English IV	1
Senior Social Science	1
Physical Education (2 periods)	-
Health	-

(NO ELECTIVES)

Behind-the-wheel training in Driver Education may be elected in any program if student meets age requirement. Arrangements will be made early in the first and second semester.

III. THE CURRICULAR CONTEXT

EXTRACURRICULAR ACTIVITIES

Extracurricular activities at Community High School include male athletics (e.g., football, soccer, basketball, tennis, track and field, baseball), female athletics (e.g., softball, field hockey), related activities (e.g., cheerleading), and a number of coeducational activities (e.g., band, chorus, student newspaper, photograph, art, student council).

IV. SPECIFICATIONS FOR SPACE

Enrollment Projections

Year	Grade 9	Grade 10	Grade 11	Grade 12	Sub-Total	Sp.Ed.	Total
1974-75	152 B 155 G 307 T	160 B 137 G 297 T	131 B 127 G 258 T	131 B 111 G 242 T	574 B 530 G 1,104 T	11 B 3 G 14 T	585 B 533 G 1,118 T
1984-85	395 T	382 T	332 T	311 T	1,420 T	30 T	1,450 T

Note: B=Boys; G=Girls; T=Total

(Horizontal):

Year	Grades 9-10	Grades 11-12	Sub-Total	Sp.Ed.	Total
1974-75	604	500	1,104	14	1,118
1984-85	777	643	1,420	30	1,450

(Vertical):

Year	½ Grades 9-12	½ Grades 9-12	Sub-Total	Sp.Ed.	Total
1974-75	552	552	1,104	14	1,118
1984-85	710	710	1,420	30	1,450

IV. SPECIFICATIONS FOR SPACE

Teaching and Learning Areas

Basically, teaching-learning areas (e.g., classrooms, other learning spaces) should be provided in each house. Elective areas can be in houses or in centralized spaces, but ease of access as well as cost should be among the key consideration factors. The Program of Studies in Chapter III can be used as a checklist.

Centralized spaces should include facilities for at least physical education, music, industrial arts, and home economics activities, and possibly space for art, an auditorium, foreign languages, large group instruction (LGI), business education and typing, and special education as well.

The instructional materials center (IMC) could be a centralized space or split among/between the houses.

Support Facilities

Space in the houses or in a centralized location must be provided for lockers, storage, teacher planning, administration, guidance counseling, health facilities, lavatories, food service, faculty room(s), and custodial/mechanical facilities. Space could well be provided for such activities as a student commons and/or lounge, and special extracurricular activities (e.g., a photographic darkroom, or a greenhouse).

Specialized Exterior Considerations

In addition to concern for minimal maintenance and access to appropriate fenestration,* specialized exterior considerations should include:

- -- Sheltered busing areas.
- -- Athletic fields and recreational provisions.
- -- Suitable pedestrian and vehicular traffic patterns.
- -- Staff and senior student parking.
- -- Site illumination.
- -- General aesthetics, including greenery.

*The arrangement and design of a building's doors and windows.